



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/505,271	02/16/2000	Angus O. Dougherty	1759/USW0573PUS	6086

22193 7590 06/15/2007  
QWEST COMMUNICATIONS INTERNATIONAL INC  
LAW DEPT INTELLECTUAL PROPERTY GROUP  
1801 CALIFORNIA STREET, SUITE 3800  
DENVER, CO 80202

EXAMINER
----------

MEHRA, Inder P

ART UNIT	PAPER NUMBER
----------	--------------

2617

MAIL DATE	DELIVERY MODE
-----------	---------------

06/15/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/505,271	DOUGHERTY ET AL.	
	Examiner	Art Unit	
	Inder P. Mehra	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-37 and 43-55 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 44-46 is/are allowed.
- 6) ☒ Claim(s) 1-37, 43 and 47-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This office action is in response to amendment dated: 3/27/2007. Claims 1-37, and 43-55 are pending.. Claims 38-42 were cancelled (refer to 10mendment dated: 2/3/05).

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11, 14-15, 21 and 47-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wang** (US Patent No. 5,898,904) in view of **Pester, III** (US Patent No. 5,475,732), hereinafter, **Pester**.

For claims 1, 21, and 47, Wang and Pester disclose "A communication system , (refer to **Wang's figs. 1-3 and Pester's fig. 1**), comprising:

- a plurality of subscriber units (**Wang's wireless terminals, col. 5 lines 50-55**), and (**Pester's EO2 and EO4, which are 16 and 20 in fig. 1**), each subscriber unit sending and receiving information packets using a wireless communication link (**1005 in Wang**), refer to col. 7 lines 25-45), and **Pester's links 24, 26, 28 and 32 in fig. 1**);
- a plurality of access points (**Wang's col. 8 lines 12-16**) and (**Pester's SP 16, SP 14, SP 255-201-103 and SP 20, cluster is Access Point in Pester, refer to col. 3 lines**

63-65), each access point (Wang's 1024) forming a coverage area (Pester' 240 in fig. 1) for exchanging information packets (Wang's packet radio, abstract, packet, col. 6 lines 54-55) and Pester's col. 1 lines 15-17) with subscriber units within the coverage area (Wang's col. 10 lines 53-58) and (Pester's region 246 in fig. 1) through at least one wireless communication link, refer to (Wang's col. 8 lines 9-25), and (Pester's links 22, 24 and 26 in left region and links 28, 30 and 32 in right region, refer to col. 4 lines 3-6); and

- Back end communication, as recited by claim 47, (Back haul communication, refer to col. 6 lines 1-3);
- a plurality of distribution points (Wang's numerous base stations, col. 8 lines 12-16) and (Pester's SP 38 called AT1 and SP 40 called AT2 in fig. 1), each distribution point in communication with at least one access point (Wang's 1024) and Pester's SP's 16 and 14 in fig. 1) and with at least one additional distribution point (Wang's second base station, col. 5 line 67 through col. 6 line 3) and (Pester's SP/AT2 40 in fig. 1), each distribution point operative to

(a) receive an information packet for distribution to a destination within the communication system (Wang's packet radio, abstract, packet, col. 6 lines 54-55, forward, col. 9 lines 15-25 and col. 10 lines line 1 through line 5) and (Pester's col. 4 lines 2-5, Pester discloses "the SP's in a given region (coverage area are connected together by local trunks 22, 24 and 26);

(c) forward the information packet to the access point (Pester's cluster 103, col. 3 lines 63-65) defining the coverage area (Pester's 246 in fig. 1, col. 3

Art Unit: 2617

**lines 60-65) containing the subscriber unit (Wang's col. 10 lines 53-58) and (Pester's EO2 and EO1 in left region 246 in fig. 1) if the information packet destination is to a subscriber unit within the coverage area of the access point in communication with the distribution point (Wang's col. 10 lines 5-11, and lines 53-58, col. 10 lines 65 through col. 11 line 3), and Pester discloses "the SP's in a given region (coverage area are connected together by local trunks 22, 24 and 26**

**(d) forward the information packet to one of the additional distribution points (Wang's base station can be added, col. 10 lines 56-58) (Pester's SP 40 in fig. 1) in communication with the distribution point if the information packet destination is not to a subscriber unit within the coverage area of the access point in communication with the distribution point, ( In Wang, refer to back bone (backhaul) interface 530, fig. 5, col. 5 line 67 through col. 6 line 10, col. 10 lines 60-65, and col. 14 lines 32-40), and Pester's col. 5 lines 1-17).**

Wang does not disclose explicitly the following limitations, which are disclosed by Pester, as follows:

- **(b) determine if the information packet destination is to a subscriber unit within the coverage area of an access point in communication with the distribution point (Pester's col. 4 lines 2-6 and col. 5 lines 10-17),**

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the capability of determine if the information packet destination is to a subscriber unit within the coverage area of an access point in communication with the

Art Unit: 2617

distribution point by Pester This capability can be combined within the distribution point, as taught by Pester. The suggestion/motivation to do so would have been to provide convenience of access by users.

For claims 2-11, 14-15, and 48-51, Wang discloses all the limitations of the subject matter of these claims, as in claim 1 above, including the following limitations:

- wherein each information packet includes at least one of voice, video, and data information, **as recited in claim 2**, (wireless terminal sends data to, and receives data from, the cellularized base stations, abstract; used ID is data information, refer to col. 8 lines 40-50 and col. 9 lines 20-25).
- wherein an information packet comprises voice information, **as recited by claim 3**, (refer to telephone 101 in fig. 1, col. 1 lines 35-50).
- wherein an information packet comprises video information, **as recited by claim 4**, (display is on display screen, refer to col. 2 lines 5-10).
- wherein all information packet comprises data. **as recited by claim 5**, (wireless terminal sends data to, and receives data from, the cellularized base stations, abstract; used ID is data information, refer to col. 8 lines 40-50 and col. 9 lines 20-25).
- wherein an information packet comprises streaming audio. **as recited by claim 6**, (refer to telephone 101 in fig. 1, col. 1 lines 35-50).
- wherein an information packet comprises streaming video **as recited by claim 7**, display is on display screen, refer to col. 2 lines 5-10).

Art Unit: 2617

- wherein the communication link is a symmetric link **as recited by claim 8**, (refer to col. 14 lines 50-51).
- wherein the communication link is an asymmetric link. **as recited by claim 9**, (refer to col. 14 lines 51-57).
- wherein the distribution point is in wireless communication with at least one access point. **as recited by claims 10, and 48**, (refer to figs 1-5, refer to abstract and col. 1 lines 25-30, figs. 6A-6C).
- wherein the distribution point is in wire line communication with at least one access point **as recited by claims 11, and 49** (refer to col. 10 lines 36-40 and col. 11 lines 35-40).
- wherein at least one distribution point is in wireless communication with at least one additional distribution point **as recited by claims 14 and 50**, (refer to “numerous base stations, col. 8 lines 14-16, col. 14 lines 5-10, col. 14 lines 33-40, and col. 14 lines 58-62
- wherein the plurality of distribution points forms a wireless network of distribution points **as recited by claims 15 and 51**, refer to col. 10 lines 60-65, and col. 14 lines 32-40.

4. Claims 12-13, 16-20, 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wang** in view of **Pester**, as above, further, in view of **Rai et al** (US Patent No. 6,577,643), hereinafter, Rai.

For claims 12 and 13, Wang in view of Pester, discloses all the limitations of the subject

Art Unit: 2617

matter of these claims with the exception of the following limitations, which are disclosed by Rai, as follows::

- wherein at least one access point is packaged with the distribution point **as recited by claim 12**, (fig. 4, refer to col. 10 lines 36-40 and col. 11 lines 35-40).
- wherein at least one access point is not collocated with the distribution point **as recited by claim 13**, (refer to fig. 5, col. 10 lines 55-60).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the capability of having access point collocated or not with distribution point, as taught by Rai. This capability can be combined within the distribution point, as taught by Rai. The suggestion/motivation to do so would have been to provide convenience of access by users.

For claim 16, Wang in view of Pester discloses all the limitations of the subject matter of these claims including the limitation

- \* “the distribution point further operative to receive an information packet for distribution within the second communication system and to send the information packet to the second communication system interface device, (back bone interface 530 in fig. 5 and network control center 309 in fig. 3, refer to col. 8 lines 11-20 and col. 12 lines 15-20)

**with the exception of the following limitations, which are disclosed by Rai, as follows:**

- a communication system interface device ((backbone interface 530 in fig. 5) operative to format information contained in the information packet to pass through a second communication system, (refer to col. 11 lines 10-15),

It would have been obvious to a person of ordinary skill in the art at the time of the



Art Unit: 2617

invention to use the capability of formatting information contained in the information packet to pass through a second communication, as taught by Rai. This capability can be combined within the distribution point, as taught by Rai. The suggestion/motivation to do so would have been to provide convenience of access by users.

For claims 17-20, Wang discloses all the limitations of the subject matter of the following claims and including following limitations:

- wherein the second communication system comprises a wireless telecommunication system, **as taught by claim 17**, 1002 and 1008 and 1025 in fig. 10, col. 10 lines 19-52, and col. 11 lines 35-40.
- wherein the second communication system comprises a wire line telecommunication system, **as taught by claim 18**, col. 10 lines 19-52, col. 11 lines 35-40.
- wherein the second communication system comprises a data network, **as taught by claim 19**, (311-315. in fig. 3)
- wherein the second communication system comprises a video distribution system, **as taught by claim 20**, (refer to col. 14 lines 58-65 and display col. 2 lines 1-5).

For claims 27-29, Wang in view of Pester discloses all the limitations of subject matter of these claims, with the exception of the following limitations, which are disclosed by Rai, as follows:

- wherein each subscriber unit is autonomously registered when the subscriber unit first enters the coverage area of a radio access point within the communication

Art Unit: 2617

system, **as recited by claim 27**, refer to Rai' col. 7 lines 48-61, col. 9 lines 17-39, and col. 15 lines 25-30.

- wherein each subscriber unit maintains registration as the subscriber unit moves from one coverage area into another coverage area, **as recited by claim 28**, refer to col. 9 lines 17-39 and col. 15 lines 25-30.
- wherein each subscriber unit is autonomously deregistered when the subscriber unit leaves the communication system, **as recited by claim 29**, refer to col. 15 lines 25-30.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the capability of, as taught by Rai. This capability can be combined within the distribution point, as taught by Rai. The suggestion/motivation to do so would have been to provide convenience of access by users and tracking users.

5. Claims 22-26 and 52-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wang** in view of Pester and Rai, further in view of **Doty et al** (US Patent No.6,795,863), hereinafter, Doty.

For claims 22-26 and 52-55, Wan in view of Pester and Rai disclose all the limitations of subject matter of this claims 22-26 and 52-55, including the following limitations:

- “wherein the distribution point (IWF) is further in communication with the internet gateway (Internet access or access to ISP), the distribution point further operative to exchange packets (frames, Rai's col. 8 lines 66-67) with the Internet gateway”, **as recited by claim 22**, refer to Rai's col. 8 lines 7-18 and Rai's col. 8 lines 65-67;

Art Unit: 2617

- wherein at least one distribution point comprises an asynchronous transfer mode switch, **as recited by claims 23 and 52**, refer to Rai's col. 11 lines 10-15.
- wherein at least one distribution point comprises an Internet protocol router, **as recited by claims 24 and 53**, Wang's, col. 12 line 67 and Rai's col. 22 lines 17-22 .
- wherein at least one distribution point comprises an Ethernet router, **as recited by claim 25 and 54**, Wang's col. 12 lines 55-60, Rai's col. 11 lines 5-15, and col. 22 lines 45-50.
- wherein at least one distribution point comprises a TDM switch ( TI's ), **as recited by claims 26 and 55**, Rai,s col. 10 lines 65 and col. 22 lines 45-50.

**Doty discloses more specifically the following limitations:**

- “wherein the distribution point Internet protocol router, **as recited by claims 24 and 53**, Doty's col. 7 lines 40-45, col. 10 lines 30-35..
- wherein at least one distribution point comprises an Ethernet router, **as recited by claim 25 and 54**, Doty's col. 10 lines 35 –60..

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the capability of the distribution point (IWF) is further in communication with the internet gateway as taught by Rai. This capability can be combined within the distribution point, as taught by Rai. The suggestion/motivation to do so would have been to provide convenience of access by users and to meet the reception requirements by users.

Art Unit: 2617

6. Claims 30, 32, and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wang** in view of Pester, further in view of **Feuerstein et al** (US Patent No.6,141,565), hereinafter, Feurestein.

For claims 30, 32, and 34-35, Wang in view of Pester discloses all the limitations of subject matter, as in claim 1 above, including the following limitations:

- “wherein subscriber unit is a fixed device or non-fixed device”, as recited in claims 34-35, refer to 100 in fig. 1 and 305 in fig. 5 respectively.

**Wang in view of Pester does not disclose the following limitations explicitly, which are disclosed by Feurestein, as follows:**

- “wherein quality error bit rate ---based on the location of the subscriber unit----”, refer to col. 1 line 65-col. 2 line 11.
- “wherein quality error bit rate ---based on the grade of service”, refer to col. 3 lines 1-3.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the capability of quality error bit rate ---based on the location of the subscriber unit and grade of service. This capability can be combined within the distribution point, as taught by Feurestein. The suggestion/motivation to do so would have been to provide quality of service as agreed to by subscriber.

Art Unit: 2617

7. Claims 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wang** in view of Pester, further in view of **Marinho et al** (US Patent No.6,738,637), hereinafter, **Marinho**.

For claims 31 and 33, Wang in view of Pester, discloses all the limitations of subject matter, as in claim 1 above, with the exception of the following limitations, which are disclosed by **Marinho**, as follows:

- “wherein quality error bit rate ---based on the class of service”, refer to abstract.
- “wherein quality error bit rate ---based on the rate of service”, refer to abstract.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the capability of quality error bit rate ---based on the class and rate of service. This capability can be combined within the distribution point, as taught by Marinho. The suggestion/motivation to do so would have been to provide quality of service as agreed to by subscriber.

8. Claims 36, 37 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wang** in view of Pester, further in view of **Zendle** (US Patent No.6,757,268), hereinafter, **Zendle**.

For claims 36, 37 and 41, Wang in view of Pester, discloses all the limitations of subject matter of these claims, with the exception of the following limitations, which are disclosed by **Zendle**, as follows:

Art Unit: 2617

- “wherein bandwidth is dynamically allocates bandwidth when the information packet is forwarded to one of the additional distribution points in communication with the distribution point”, refer to col. 5 lines 10-15, col. 9 lines 14-30, and col. 13 lines 20-25.
- “wherein bandwidth is dynamically allocated when an information packet is exchanged between one of the plurality of subscriber units and one of the plurality of access points”, refer to col. 5 lines 10-15, col. 9 lines 14-30, and col. 13 lines 20-25.
- wherein communication link bandwidth is only consumed when packets containing information are transmitted, thereby only utilizing link bandwidth when information is sent or received, **as recited by claim 41**, (refer to “a sector may utilize the full bandwidth---of a channel----to meet overall customer demand for bandwidth, refer to col. 7 lines 25-30”.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the capability of changing bandwidth dynamically. This capability can be combined within the distribution point, as taught by Zendle. The suggestion/motivation to do so would have been to provide convenience of access by users.

9. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Wang** in view of **Pester, III**, hereinafter, Pester, as above, fuether in view of **Blakeney, II et al** (US Patent No. 5,640,414), hereinafter, Blakney.

For claim 43, Wang discloses all the limitations of the subject matter, as in claim 1, with the exception of the following limitations, disclosed by Pester and Blakeney, as follows:

Art Unit: 2617

- a supervisor in communication with each distribution point, the supervisor operative to identify the distribution point with which each subscriber unit is communicating, refer to Blakney's col. 3 lines 55-60, and abstract.,.
- to provide each distribution point with a listing of to which of the at least in one additional distribution point in communication --- the distribution point", (**refer to Pester discloses, "The STPs look at a point code and if it is not for them they just pass it on via a route determined from translations and routing tables", refer to col. 5 lines 35-37).**

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the capability of "determining any packets that are to be transmitted", and "queuing packets within non selected subscriber units for later transmission, as taught by Tran and Jones. The suggestion/motivation to do so would have been to optimize the resources to facilitate high priority transmission.

#### ***Allowable Subject Matter***

10. Claims 44-46 are allowed.

#### ***REASONS FOR ALLOWANCE***

The following is an examiner's statement of reasons for allowance:

The prior art of record does not disclose or teach directly or indirectly the following limitations in combination with other limitations, follows:

As recited by claim 44,

Art Unit: 2617

“a supervisor in communication with each distribution point, the supervisor operative to provide each distribution point with a listing of to which of the at least one additional distribution point in communication with the distribution point information packets should be forwarded for each possible destination distribution point, the listing based on maintaining a minimum quality of service in a path to the destination distribution point”.

As recited by claim 45,

“transmitting a sign-on signal from the new distribution point;

receiving the sign-on signal in at least one distribution point in the network of existing distribution points;

assigning a routing address to the new distribution point; and

providing each distribution point in the network of existing distribution points with an indication as to which additional distribution point in the network of existing distribution points each information packet having a destination address specifying the new distribution point is to be forwarded”.

As recited by claim 45,

detecting the absence of signal from a distribution point to be removed from the network;

determining a connectivity between distribution points remaining after

removing the distribution point detected with the absence of signal; and

providing each remaining distribution point with an indication as to



Art Unit: 2617

which distribution point in communication with the remaining distribution point each information packet having a destination address specifying the remaining distribution point is to be forwarded.

### *Response to Arguments*

11. Applicant's arguments filed 3/27/2007, some of these being the same as were raised in applicant's response dated: 2/3/05, have been fully considered but they are not persuasive.

Applicant argues, "With regard to claims 1, 21, and 47, Wang fails to teach, disclose, or suggest each distribution point operative to forward the information packet to the access point defining the coverage area containing the subscriber unit if the information packet destination is to one of the plurality of subscriber units within the coverage area of the access point in communication with the distribution point. Instead, Wang's "[b]ase station 1003 transmits the message received from pager 1005 to network control center 1009," col. 8, 11. 61-62.

In response, examiner states that **Pester discloses, in reference to fig. 1, distribution points, refer to Pester's SP's 38 and 40, forwarding information to the access points, Pester's SP's 14, 16 and 20, defining the coverage area (246 and 255 respectively) containing the subscriber unit (EO1, EO2, EO3 and EO4) if the information packet destination is to one of the plurality of subscriber units (EO1, EO2, EO3 and EO4) within the coverage area (240 or 255) of the access point (SP's 14, 16 and 20) in communication with the distribution point (SP's 38 and 40).**

Applicant argues, "With regard to claims 1, 21, and 47, Wang fails to teach, disclose, or suggest **each distribution point operative to forward the information packet to one of the additional distribution points in communication with the distribution point.** Instead, Wang's

Art Unit: 2617

"base station 1003 transmits [a] message . . . to . . . subscriber 1005A," col. 8, 11. 54-56, and "[b]ase station 1003 transmits the message received from pager 1005 to network control center 1009," col. 8, 11.61-62. Wang's subscriber and network control center are not the claimed additional distribution points"

In response, examiner states that a plurality of distribution points (**Pester's SP 38 called AT1 and SP 40 called AT2 in fig. 1**), each distribution point in communication with at least one access point (**Pester's SP's 16 and 14 in fig. 1**) and with at least one additional distribution point (**Pester's SP/AT2 40 in fig. 1**), each distribution point operative to

(a) receive an information packet for distribution to a destination within the communication system (**Pester's col. 4 lines 2-5, Pester discloses "the SP's in a given region (coverage area are connected together by local trunks 22, 24 and 26);**

(c) forward the information packet to the access point (**Pester's cluster 103, col. 3 lines 63-65) defining the coverage area (Pester's 246 in fig. 1, col. 3 lines 60-65) containing the subscriber unit (Pester's EO2 and EO1 in left region 246 in fig. 1) if the information packet destination is to a subscriber unit within the coverage area of the access point in communication with the distribution point (Wang's col. 10 lines 5-11, and lines 53-58, col. 10 lines 65 through col. 11 line 3), and Pester discloses "the SP's in a given region (coverage area are connected together by local trunks 22, 24 and 26**

(d) forward the information packet to one of the additional distribution points (**Wang's base station can be added, col. 10 lines 56-58) (Pester's SP 40**

Art Unit: 2617

**in fig. 1) in communication with the distribution point if the information packet destination is not to a subscriber unit within the coverage area of the access point in communication with the distribution point, ( In Wang, refer to back bone (backhaul) interface 530, fig. 5, col. 5 line 67 through col. 6 line 10, col. 10 lines 60-65, and col. 14 lines 32-40), and Pester's col. 5 lines 1-17).**

Applicant argues, "With regard to claims 1, 21, and 47 Pester fails to teach, disclose, or suggest each subscriber unit sending and receiving information packets using a wireless communication link. Examiner asserts that this limitation may be found in "Pester's links 24, 26, 28 and 32 in fig. 1." Office Action, January 9, 2007, p. 2. Pester, however, states that With regard to claims 1, 21, and 47 Pester fails to teach, disclose, or suggest each subscriber unit sending and receiving information packets using a wireless communication link. Examiner asserts that this limitation may be found in "Pester's links 24, 26, 28 and 32 in fig. 1." Office Action, January 9, 2007, p. 2. Pester, however, states that The broken lines connecting the SPs together may be analog trunks or voice or similar circuits. The SPs in a given region are connected together by local trunks 22, 24, 26 in the left region and 28, 30, 32 in the right region. Col. 4, 11. 2-5. Pester's "analog trunks or voice or similar circuits" are not wireless communication links.

In response, examiner states that Wang discloses "two way radio link", refer to **Wang's col. 8 lines 9-25.**

Applicant argues that ICN trunk 34 of Pester, however, does not carry SS7 messages, e.g., IAM, between AT1 38 and AT2 40.

Art Unit: 2617

In response, examiner states that STP "SS7 messages" are not claimed, as such, in independent claims. However, Pester discloses STP's in fig. 1, where SS7 monitors are placed, refer to col. 2 lines 18-20.

Examiner Fails To Establish A Prima Facie Case Of Obviousness

With regard to claims 1, 21, and 47, Examiner states that

It would have been obvious to use the capability of determine if the information packet destination is to a subscriber unit within the coverage area of an access point in communication with the distribution point by Pester. This capability can be combined with the distribution point, as taught by Pester. The suggestion/motivation to do so would have been to provide convenience of access by users.

Office Action, January 9, 2007, pp. 4-5.

Examiner thus suggests that Wang's base stations can be modified to determine if the information packet destination is to one of the plurality of subscriber units within the coverage area of an access point in communication with the distribution point. Wang, however, teaches away from such functionality for its base stations. As explained above, Wang's "base station 1003 transmits [a] message . . . to . . . subscriber 1005A," col. 8, 11. 54-56, and "[b]ase station 1003 transmits the message received from pager 1005 to network control center 1009," col. 8, 11.61-62. Wang's "network control center 1009 sends a message to subscriber 1006A's paging service 1017, notifying subscriber 1006A that he has a message from subscriber 1005A at network control center 1009 [and] when the message is received by paging service 1017, the message is sent to transmitter 1025 . . . and transmitted to pager 1006." Col. 9, 11. 9-18.

Art Unit: 2617

Examiner's suggestion to modify Wang with Pester is not technically feasible as such modification implicates the operation of Wang's network control center and paging services and renders Wang inoperable for its intended purpose

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Peaster discloses plurality of access points, distribution points and subscriber units for communication in their respective coverage areas and across distribution network including different coverage areas. Wang discloses Base Station (access points) and NCC (distribution points) for communication with wireless terminals (subscriber units).

Disclosed examples and preferred embodiments do not constitute **a teaching away** from a broader disclosure or nonpreferred embodiments. In *re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In *re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994) The court upheld the rejection concluding that applicant's argument that the reference teaches away from using epoxy was insufficient to overcome the rejection since "Gurley asserted no discovery beyond what was known in the art." 27 F.3d at 554, 31 USPQ2d at 1132.).

Art Unit: 2617

Furthermore, “[t]he prior art’s mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed....” In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004), see MPEP 2123.

**In light of above explanation, arguments by applicant are not persuasive.**

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Inder P. Mehra whose telephone number is 571-272-3170. The examiner can normally be reached on Monday through Friday from 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Inder Pal Mehra 6/9/07*

Inder P Mehra  
Examiner  
Art Unit 2617

  
JOSEPH FEILD  
SUPERVISORY PATENT EXAMINER